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Author: Julia Puebla Fortier, DiversityRx

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DEVELOPING CAPACITIES IN MIGRATION MANAGEMENT

Abstract

Migration offers many opportunities for individuals, communities and countries to advance development. Proactively addressing the health needs of migrants in a development context can support their health and well-being, enhance their societal and economic contributions, and help countries meet their overall health goals. Yet migrants face many challenges staying healthy and accessing health care, risking both their productivity as well as their development potential. In fact, the vulnerabilities inherent in the migration process and the kinds of work migrants do can endanger their physical and psychological health. Addressing these needs is challenging, given the complexity and characteristics of different migrant flows and the multiplicity of health and psychosocial concerns. This paper will look at the health of migrants in the context of development, from pre-departure to return. It will review mechanisms of social protection for health available to migrants, identify opportunities to support the health of migrants through social and technological innovations, and examine migration health issues in the context of the Sustainable Development Goals. Since the first Global Consultation on Migrant Health, considerable efforts have been made by civil society, national and international parties to include migrants in development and public health agendas. Practice, policy and strategic lessons from these efforts must be evaluated and new priorities set.

Introduction

Development is a major driver of migration, both as a response to conditions at home as well as opportunities available abroad. Migration carries the potential for substantial development benefits, powered by the physical, intellectual, social, and financial capital that migrants offer. All this rests on good health. Without health, migrants cannot work, be productive, or contribute to the social and economic development of their communities of origin and destination.

This paper will look at the health of migrants in the context of development, from pre-departure to return. It will review mechanisms of social protection for health available to migrants, examine the opportunities to support the health of migrants through social and technological innovations, and place migration health issues in the context of the Sustainable Development goals.

More than 247 million people, or 3.4 percent of the world population, live outside their countries of birth. Excluding refugees from the West Bank and Gaza, the number of refugees in 2014 was 14.4 million. About 86 percent of refugees are hosted by developing countries. The volume of South-South migration stands at 38 percent of the total migrant stock, which is larger than South-North migration (34 percent).[1] Migrants who move within their own countries are estimated at 763 million,[2] and internally displaced people are estimated at 38.2 million.[3]

This paper uses the International Organization for Migration (IOM) definition of migrant, which is "any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence, regardless of (1) the person's legal status; (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is."[4] This includes all the migrant categories described above. But it can also be helpful to think broadly about mobile populations, which may include sex workers; pastoralists; fishing communities; transporters; international students; international business, government and civil society workers; and uniformed personnel. Although the primary focus will be health considerations of voluntary migrants, promising practices and policies related to other migrant typologies will be considered.

Migration in a development context holds the potential of improved health status through access to higher income, better housing, improved nutrition, and a higher standard of health care. It often involves not just individuals but families, communities, and social (religious, ethnic, occupational) groups. Although many migrants experience a higher standard of living and health status in their destination communities, and are able to improve the lives of their families at home through remittances, the broad category of migrants and mobile populations encompasses many vulnerable and at-risk groups. These include irregular migrants and low-skilled workers, particularly women and youth in precarious employment settings, who are currently invisible in health and social protection systems.

Migrants face many challenges to accessing health care and staying healthy, endangering both their productivity as well as their development potential. In fact, the vulnerabilities inherent in the migration process and the kinds of work migrants do can endanger their physical and psychological health. The migration process, from pre-departure to living in the destination community, is a social determinant of health, a condition in which people are born, grow, live, work, and age. The health disparities arising between migrants and native populations

demonstrate the power of this, altering the overall health status of a country, which in turn affects the ability of countries to reach development goals.[5]

The World Health Assembly resolution on the health of migrants recognizes "that health outcomes can be influenced by the multiple dimensions of migration."[6] Risks to migrants' health vary according to migrants' individual characteristics (gender, age, disability, etc.), their education level, and, most notably, their legal status. Irregular migrants in particular face higher risk of exploitation and marginalization, including lack of access to health services. The World Health Organization (WHO) and others note that "Migrants ... are often subjected to stigmatization, gross violations of human rights, and inhumane treatment [and] are among the most frequently discriminated against when it comes to accessing general health care."[7]

Health of migrants in a development context

There are many ways that migration in a development context affects health, and there are economic, social, legal and other determinants that add complexity. This section will look at four considerations: the conditions that compel people to move to seek a better life, the effects of the kind of work they do in the place they have moved to, the impact of their migration on the families and communities they have left behind, and what happens when they return to their home countries.

Pre-departure health

People leave their homes for many reasons, moving from one country to another, or to another part of the same country. They may be fleeing violence or persecution, escaping a situation that is not adequate to meet their needs, or seeking better opportunities for education and employment. In developing countries, the level of health in their communities, and the resources available to meet them, is often lacking. The burden of disease is can be high, and basic health needs may be left unattended. These factors may have an impact on migrants' ability to leave their countries in search of work, as pre-departure and arrival medical assessments may screen out migrants with health problems.[8] For example, 29 countries deport migrants who are HIV positive. Some destination countries require yearly medical screenings for migrant workers which may include a mandatory HIV test. If they do test HIV positive, the migrant is frequently not told the test results, but only informed that they have failed the exam and are to be detained or immediately deported.[9] In countries where health status and health resources are higher, people may leave with an adequate level of health, but acculturation and exposure to unhealthy lifestyles in destination countries may erode their health status. The migration process itself can expose some migrant groups to health risks through unsafe travel, changes in disease epidemiology, poor nutrition or living conditions, and psychosocial stress. Some migrants may be especially vulnerable, such as those forcefully displaced, or being trafficked, or in an irregular status. Already traumatized families and children escaping from dangerous regions, such as the Middle East or Central America, face additional risks from depression, anxiety, and suicide when faced with detention during the migration process.

Destination country health

Upon arrival in the destination country, the kind of work migrants do in a development context may have a detrimental impact on their health. For low-skilled or irregular migrants, many jobs are dirty, dangerous, and demeaning (DDD), do not have occupational health protections, and may be exploitative. Occupational risks are common in mining, construction, manufacturing and agriculture, including inadequate training, lack of protective gear, and exposure to toxic agents and conditions.[10] For example, in Africa, while migrants are commonly drawn to mining and agricultural work, migration also has a powerful impact on urban areas. Living in impoverished situations in dense urban slums, migrants are exposed to a variety of communicable diseases, malnutrition, and poor sanitation. They may have limited access to health services that are already quite strained.[11] With respect to migrant domestic workers, a systematic review identified health threats associated with adverse work conditions such as physical, verbal, and sexual abuse at the workplace; caregiving tasks associated with musculoskeletal strain; and chemical exposure associated with respiratory difficulty.[12] A recent study of Sri Lankan women returning from domestic employment in the Middle East showed evidence of injuries, repetitive/systematic violence, psychological trauma, and confiscation of personal identity papers and travel documents[13]

In addition, many migrant workers have limited awareness of or access to health and social services due to a combination of legal, structural, socio-cultural, linguistic, behavioural, and economic barriers. These factors are multiplied in consequence for migrants in an irregular situation and for those who have been trafficked or forced to move.[14] In some countries, migrants are seen as difficult to treat, carriers of disease, and a burden on the health system.[15] Xenophobic discourse and attitudes from health care providers and the surrounding community compounds the psychological stress that migrants experience. Thailand has attempted to address the issues of socio-cultural and linguistic barriers to health care for migrants by identifying 11 components of migrant-friendly health services, highlighting the need for building staff capacity to improve attitudes and cultural awareness. They have developed indicators for client-friendly health services for migrants that include attention to lifestyle and culture, occupation and living conditions, convenience of access, cooperation with migrant work employers, and cross-border linkages of health systems. They credit improvements toward better client-friendly health services in Thailand to the close public-private collaboration between non-governmental organizations (NGOs) and the health sector at all levels.[16]

Impact on families and communities left behind

Finally, the departure of a key family member who seeks work abroad can both positively and negatively affect the family members left behind. Family visits are infrequent and regular communication can be difficult. There may be little or no possibility of family reunification in the host country. This results in an emotional gap between migrants and their family members. Migrants leaving families behind have an impact on the household structure, gender roles and relationships, and intergenerational relationships. Children and the elderly are particularly at risk when female migrants working as caregivers abroad are constrained in their ability to care for their own extended families. In places where there are many such emigrants, the multiplier effect of so many individuals in prime working ages missing can have a devastating impact on social cohesion and the psychosocial profile of a community.

Two areas of health, child nutrition and mental health, illustrate some of the complex effects of migration on families left behind. Enhanced purchasing power for food from remittances can improve nutritional status in children left behind, but the care burden created by having one parent gone can create greater strains in attending to the feeding and physical care of these children. Little research has been done on the nutritional and health status of children left behind, and the studies that exist show mixed effects. A literature review of the impact of migration on nutritional status and child care practices for children left behind in eight countries shows the different effects of the absence of a mother or father on a variety of nutritional and health status measures, with additional impacts related to the socioeconomic status of the family, educational attainment of the parents, and other factors. The authors highlight the need for targeted nutritional programs, especially for poor migrant families, and skills building and support related to care provision, food preparation and investing remittances.[17]

With respect to mental health, there is a complex web of relationships between migrant parents, left-behind partners and children, and extended family members who may provide care or be in of need care themselves. Similar to the literature on the nutritional status of the left-behind child, studies on the migration impacts on mental health of left-behind family members shows a variety of effects. For example, left-behind children in south Asia and the former Soviet Union are described as having both negative and positive psychosocial outcomes.[18] A study in China showed that left-behind children are at risk to develop emotional/behavior problems, especially if left behind early in life, for longer periods, or in the care of young caregivers or nonrelatives with poor education and low socioeconomic status.[19]

Caregivers as well as children are affected by the absence of a migrant family member. A review of data from Vietnam, Indonesia, and Philippines shows that stay-behind mothers with husbands working overseas are most likely to experience poor mental health, although in Indonesia all carers are adversely affected.[20] Results from a nationally representative study in Sri Lanka shows the synergist effect of poor mental health between carers and children: two in every five left-behind children were shown to have mental disorders and behavioural problems, with greater risk in male-headed households. Male left-behind children were more vulnerable to psychopathology. In the adjusted analyses, significant associations between child psychopathological outcomes, child gender, and parent's mental health status were observed.[21]

The authors of the Sri Lanka study advocate for a multi-sectoral approach to monitoring and supporting the health of left-behind families that can be adopted at district and national levels. Community programs are needed to identify and address the social, health, and nutrition issues of families with a parent working abroad. These could be carried out by public health midwives, child protection officers, school counselors and foreign employment agency welfare officers. Programs include mapping and vulnerability assessments of children of migrant families at the pre-departure phase; case management or care plans for left-behind children using community participatory approaches; information for prospective migrant families; and guidance for primary caregivers of left behind children.[22,23]

Return migration and health

Migrants returning to their countries of origin may also face significant health related challenges[24]. For those previously living in destination countries with a higher standard of health care, they may have difficulty maintaining a continuity of care that is at the same level, and may

even face eligibility barriers after not working at home for many years. Those who have worked in economically, physically or emotionally difficult situations may return home because of health problems, injuries or abuse acquired while living abroad. Migrants in some countries are screened for diseases and health conditions and can be summarily deported, plunging them into a situation without security or resources while facing illness. And mental health problems and psychosocial adjustment issues are common in those repatriating, regardless of their previous circumstances.[25] More work needs is required to identify strategies to support the health of returning migrants. The Philippines offers a compulsory insurance program for migrants that covers the cost of repatriation and medical repatriation, and has several government programs that provide repatriation and reintegration assistance, including psychosocial services.[26]

With respect to addressing the mental health and reintegration needs of returning domestic workers who may have suffered abuse in their overseas placements, the Indonesia Red Cross worked with the Indonesia Department of Manpower to organize support group sessions in which returnees could share their experiences with other women and mental health professionals. The program also provided psycho-educational sessions for family members in cases of severe psychological problems.[27]

Movement of health workers

The "brain drain" caused when health and social care workers leave to take more attractive jobs in other countries is another negative impact on the health of communities left behind. The increased demand in the health and care industry around the world, especially in the aging global north, has led women from the Asia-Pacific region to fulfill that need. The departure of skilled migrant workers from developing countries causes workforce shortages in those countries, which is often filled by migrant workers from other developing countries.[28] Over the last decade, there has been an 84 percent increase in the number of migrant doctors and nurses in OECD countries from health workforce shortage countries.[29]

Related to this is a growing trend of "elder migrants," where families of elders in high-income countries seek more affordable elder care in emerging economies. In Germany, for example, families who want to avoid the high cost of long term care and mandatory long term care insurance are sending elders to live and receive care in Poland and other Central European countries. While this may stimulate the labour market in these countries as care facilities and caregiving jobs are created to serve these migrants, "a kind of two-tier system is created by this medical tourism that diverts resources from locals to attract high-end, self-paying tourists. Critics claim that the influx of German pensioners into neighboring countries like Poland creates capacity shortfalls that necessitate the relocation of local seniors to other, cheaper countries such as the Ukraine."[30]

Health infrastructure and remittance contributions

On the other hand, successful migrants also fit into the intersection of health and development by making direct investments in health care infrastructure, (such as building clinics and hospitals), and engaging in philanthropy with a health and health education focus, (e.g., disaster relief, reconstruction, training initiatives through diaspora foundations, and joint public-private initiatives).[31] There is also the potential of migrants returning home with skills needed in the

health sector. While the focus is often on the impact of the brain drain in the health sector, some migrants return to their home countries after seeking education or work opportunities abroad. Health professionals with training and experience in more developed countries can enhance the capacity of their home countries upon their return. Eritreans Abroad works with health professionals who return for months or years to provide treatment and engage in training health professionals. The Migration for Development in Africa (MIDA) Ghana Health Project facilitates the temporary return of health professionals from the diaspora, as well as short term training in Europe of Ghana-based clinicians,[32] and MIDA Somalia brought in Somali diaspora experts from Sweden who facilitated 33 workshops and trained 87 local health professionals.[33]

While migration is a risk for left-behind families, migrants contribute to improving the socioeconomic development of those in their home countries. Sending of remittances to home countries is widely seen as having a positive impact on the health and socioeconomic status families and communities connected to the migrant abroad. In 2015, worldwide remittance flows are estimated to have exceeded $601 billion. Of that amount, developing countries are estimated to receive about US$441 billion per year, a figure three times the volume of official development aid. These inflows of cash constitute more than 10 percent of GDP in some 25 developing countries and lead to increased investments in health, education, and small businesses in various communities.[34] Although the literature is very limited, these remittances may support positive outcomes on some health measures, such as children's birth weight and mortality, women's reproductive health and nutritional status, and health care utilization.[35]

In summary, the health, education, and social needs of left-behind family members need to be viewed in balance with the lost opportunities of not having someone migrate for work. For remittance-dependent economies, this is an important consideration for governments and international agencies seeking to better manage migration for development and poverty alleviation. Labour migration involves balancing foreign exchange gains against negative social and health impacts.[36]

Social Protection in Health and the Role of Public-Private Partnerships in Supporting Migrant Health

It is difficult for migrants to stay healthy and work productively if they cannot afford health services, whether prevention and basic care or costly hospitalizations due injury or catastrophic illness. To reach the goal of universal health coverage, social protection in health, through public or private insurance schemes, is particularly important for migrants who are away from their home health systems. A spectrum of responses to the need for health coverage have been instituted, from allowing migrants full participation in a country's universal health system to only covering health services in emergency situations.

It can be helpful to compare the approaches of some migrant-sending countries that offer forms of health coverage for their emigrating citizens (for example, Philippines, Mexico, and Sri Lanka) with the approaches of destination countries that offer different mechanisms (such as the Thailand, United States, certain European Union countries, Argentina, and South Africa).

Recognizing the power of migrant remittances, insurance provided by countries of origin may include a compulsory package of comprehensive overseas benefits that requires payment of a

fee or social security contribution by the migrant. Limitations of these programs may include lack of coverage for those in the informal sector, lack of awareness of these benefits among migrants, and more emphasis on emergency than primary care coverage.

Destination countries offer a wide spectrum of approaches, from barring access to national health schemes for all migrants to providing universal coverage on par with citizen benefits. Factors may include the legal status of the migrant, time of residency requirements. Health benefits may be funded by workers, employers or the government, or some combination. In some cases workers may contribute to social security schemes but not be able to access benefits or carry them back home.

Types of social protection for health for migrants

The discussion below will identify examples different mechanisms of social protection for health available to migrants, but not provide a comprehensive list of each type.

Only a handful of countries, including, (but not limited to), France, the Netherlands, and Denmark, give legal migrant workers unconditional inclusion in a system of health coverage.[37] Other countries, such as Sweden, allow equal access for regular migrants but more limited access for undocumented migrants. In Italy, for example, undocumented migrants are entitled to essential and urgent basic healthcare services, such as maternity care and healthcare for infectious diseases. After a three-month waiting period legal migrants in Canada are entitled to the same healthcare coverage as Canadian nationals, but the entitlements of undocumented migrants and certain asylum-seekers are less comprehensive. In Costa Rica and Morocco, foreigners who are in the country irregularly can access the health system for emergency services.[38]

Some countries require migrants or their employers to purchase health insurance, which may be private or sponsored by the government. Malaysia has a mandatory private medical coverage scheme for all foreign workers, and Singapore has a similar requirement for semi-skilled workers. Thailand allows undocumented migrants to opt into its Compulsory Migrant Health Insurance scheme, which regular migrants obtain through their employers, often having to pay part of the premium. However the scheme does not have the same benefits as those available to Thai citizens. In countries where insurance schemes are private for migrants, even when they are mandatory, workers may be dependent on employers for registration and maintenance. Without proper monitoring and enforcement, employers may attempt to reduce costs by under-insuring workers or, for irregular migrants, not insuring them at all.[39]

A few countries offer health protection for their citizens who move abroad, including Sri Lanka and the Philippines. The Overseas Filipinos Program (OFP) covers nationals living or working abroad, including irregular migrants, emigrants, dual citizens, and international students. Land-based overseas workers are required to pay their premiums individually, while shipping companies cover the cost for sea-based workers.[40]

Some countries offer private insurance with provisions especially for migrants (Australia[41]), or allow migrants the option to buy into national insurance schemes (Moldova[42]). Other countries allow migrants to pay into a social security system that includes health benefits, and then carry some of those benefits when they move to other countries. This occurs primarily within the European Union, and between countries that have negotiated specific bilateral agreements. The

concept of portability of health insurance is an attractive one, but economists Holzmann and Koettl outline the complexity of this approach among countries with varying benefit levels, health care costs, financial resources for social protection programs, and political will to include migrants.[43]

With respect to health coverage for refugees, in 2012 the United Nations High Commissioner for Refugees (UNHCR) released an analysis of different options and examples of insurance schemes in nine countries, from special schemes for refugees in the national health system to small self-insured schemes supported by nongovernmental health organizations.[44] One that is promoted as a model is the inclusion of refugees in Iran's Universal Public Health Insurance (UPHI) scheme, also known as Salamat Health Insurance. The scheme was collaboratively developed by UNHCR, the Bureau for Aliens and Foreign Immigrants Affairs (BAFIA) of the Ministry of Interior, and the Iran Health Insurance Organisation. There are approximately one million registered refugees living in Iran. Under the Salamat health insurance, 300.000 identified vulnerable refugees will be covered by UNHCR for six months by paying US$9.12 per person. Another model of health protection is offered in Kinshasa, Democratic Republic of the Congo, where refugees benefit from a voluntary mutual health insurance scheme run by the Catholic diocesan health system. (Access to health services may be differentiated for asylum seekers and those with confirmed refugee status. The latter often have access to health coverage on par with country nationals.)

In the realm of public-private partnerships, trade unions in Argentina advocated for the creation of The National Registry of Rural Workers and Employers to support an unemployment scheme for farm workers facilitates access to social security and health benefits. In South Africa, TEBA Ltd, the mining sector recruitment and labour management agency, offers employees pre and post employment medical assessment, emergency medical transport, and home-based HIV/AIDS services.[45]

Barriers, benefits and principles of social protection for health

Outside these few examples, the vast majority of migrants, and nearly all irregular migrants, do not have access to adequate, affordable health protection. Social and political antagonisms towards migrants have stripped many health benefits from national health programs that previously offered them, and the trends in this direction seem to be gaining force in many countries. Even when they do have access to insurance, migrants often have difficulties accessing health services. Health care providers may discriminate, and there are linguistic and cultural barriers to care for migrants accessing foreign health systems.[46] An IOM review of migrants' access to health and social security in South America reports that migrant's lack of financial resources, inadequate information, and geographic constraints also impede access to health services.[47] These factors will all need to be considered in the drive to achieve the goal of universal health coverage.

Aside from the public health and human rights arguments for providing equitable health coverage to migrants, the case for economic benefits is increasingly strong. The recent IOM consensus document on access to health services for migrants in an irregular situation reports that numerous recent studies show that providing access to primary services is less expensive than restricting migrants to emergency only services.[48] Some studies use data on actual expenditure from health service accounting systems,[49] and others are based on theoretical models or estimates.[50]

In “Social Protection for Migrant Workers: National And International Policy Challenges” van Ginnkan identifies five major policy challenges to extending and improving the social protection for international migrant workers and their families: defining the basic floor for social protection for migrants; providing access to social security in countries of employment; providing social protection for families left behind and preserving migrants’ rights to benefits there; improving the portability of benefits; and offering basic social protection to all migrants, regardless of their status.[51] While these recommendations address all forms of social and labour protection, they can be applied to health coverage as well, and are in fact essential principles in the pursuit of universal health coverage.

Social and Technological Innovations to Support Migrant Health

Facilitating communication with and among migrants has taken off with the widespread use of mobile phones and internet-enabled devices. Access to information and communication across the globe not only supports migrants’ connections with their families, but also offers an opportunity to link them to health information and services as never before.

Creative applications of internet- and mobile phone-based technologies for health have been under development for many years, and are increasingly supported in both developed and developing countries. Notwithstanding the passion for joining health and technology for humanitarian purposes, the evidence base for the field is still emerging. A number of systematic reviews on the effectiveness of these tools show varying results. Cochrane reviews on mobile phone messaging for preventive health[52] and for facilitating self-management of long-term illnesses[53] show only limited evidence of benefit for these applications in select cases. But another examination of the use of text message reminders for health showed improved outcome in 77 percent of 60 reviewed studies.[54]

There are very few studies that focus specifically on mobile health applications with migrant populations. Among them, a multimedia HIV testing campaign for Latino immigrant men in the United States found an immediate impact on attitudes and beliefs towards testing, with HIV testing rates increasing over time.[55] In Germany, researchers tested an internet-based bilingual health assistant designed for Turkish migrants and found acceptance by first generation migrants, with a particular preference for accessibility on smartphones.[56] Another project, focusing on Turkish migrants in the Netherlands and the UK, is testing whether a culturally adapted cognitive behavioral therapy-based online program can help reduce suicidal ideation in this population, which may avoid face-to-face mental health services for cultural reasons.[57] There are other examples of custom-designed tools as well as applications adapted for the cultural and linguistic needs of migrants in developed countries, but there is little information about using tech tools to support the health of migrants in the developing world despite the high prevalence of mobile phone use in this population.

There has been a recent surge in experimenting with mobile technologies to support health in refugee populations, and the success or failure of these interventions could be relevant for use with all populations on the move. The Syrian refugee crisis in particular has inspired a variety of tech tools to support refugees at all stages of their journey, from the war-zone to resettlement communities. Some interventions are cutting edge, and others are new iterations of strategies used in other health settings or in other sectors.

Applications for providers

Among the applications developed for providers, a tablet-based tool for clinicians working with refugees in Lebanon combines cloud-based patient record information with SMS technology to track and connect patients with their medical history, prescriptions and appointments.[58] In Jordan, WHO is partnering with the Ministry of Health to implement public health monitoring of refugees through real-time reporting from primary and secondary care facilities via mobile technology. Providers also have access to diagnostic algorithms, prescription recommendations, disease management modules, and a mental health service programme.[59,60] This is similar to a earlier program implemented to monitor and report on infections diseases among displaced people in South Darfur. E-learning, telemedicine, and telesurgery support are being offered to health professionals working in conflict areas in Syria,[61] a model that based on years of experience in disaster, rural, and other low-infrastructure settings. A multi-country intervention, Re-Health, supported by the EU and the IOM, combines an online health database of information and health assessment records for providers and other stakeholders with a portable migrant personal health record, supported by health promotion and support activities from health mediators/interpreters.[62]

An mHealth tool developed by Massachusetts Institute for Technology (MIT) – Sana is a tablet-based open source software application designed to help patients to keep track of their medical files, and will also allow physicians have access to treatment guidelines and previous consultation records. By using the mHealth application, physicians will be able to provide patients with their disease history and the medications prescribed at every visit by sending an SMS to the patient's cellular phone. The application will also track the date of the next follow up visit, and send a reminder to the patient's cellular phone. The application seeks to improve the patient's ability to monitor their condition, and provide easy access to medical information in case the patient moves or unexpectedly seeks care from another provider, which occurs in contexts with refugees.[63]

In Germany, social entrepreneurs, a university hospital, the Red Cross, local government, and a translation company have collaborated to set up mobile medical clinics repurposed from shipping containers that offer primary care supported by video interpretation services for asylum seekers.[64]

Applications for migrants

For migrants themselves, Hababy is a web app in development that is intended to offer pre- and post-natal information for refugee women. The information will be country-specific and in multiple languages, with an emphasis on visual communication, and an option for live chat with a health care professional, as well as offline features. In the area of psychosocial support, "Karim" is an Arabic-language personalized text message program based on artificial intelligence software to support dialogue about emotional problems.[65] In the Netherlands, an online mental health information and advice platform for Moroccan-Dutch migrants has been active since 2012, and in the first year had nearly 10,000 unique visitors who sought counsel on topics from puberty to bewitchment.[66] IOM has developed a smartphone application called MigApp

designed to help migrants make informed decisions throughout the migration process and to access services, including health care.[67]

The design of tech tools for migrants and refugees must take into consideration not only the practical realities of access to internet/mobile devices and networks, access to electricity for charging, and data security, but also age, acculturation, literacy levels, health beliefs and experiences, and acceptance of digital technology.[68, 69, 70] "As with many other health improvement projects, a key challenge is moving mHealth approaches from pilot projects to national scalable programs while properly engaging health workers and communities in the process."[71] A review of mHealth projects in Africa concludes that success is based on 'the accessibility, acceptance and low-cost of the technology, effective adaptation to local contexts, strong stakeholder collaboration, and government involvement.'[72] Finally, it is critical to rigorously assess the utility and efficacy of these tech applications. They may be effective for facilitating the work of health professionals working with migrants (monitoring, information transfer, coordination), and engaging and educating migrants about health issues. But the hurdles to effective and appropriate customization, implementation and evaluation are quite high, and it is premature to expect a significant impact on health outcomes.

Migrant Health and the Sustainable Development Goals

As a successor to the Millenium Development Goals, in 2015 the UN General Assembly adopted 17 Sustainable Development Goals (SDGs) as part of a global agenda for sustainable development.[73] The SDGs offer a unique and far-reaching framework for addressing the health of migrants that will engage the attention, efforts and resources of national and international actors as they work to achieve the SDG targets. Two key points in the agenda open the door for migrant-oriented efforts – the overarching goal of 'leave no one behind' and the inclusion of a first time, explicit goal related to migration – SDG 10 – to "facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies." These two imperatives compel communities, national governments, humanitarian, and development stakeholders to work together to integrate the health needs of migrants into national plans, policies and strategies across sectors. A number of goals and targets of particular relevance to the migrant health domain illustrate the multi-sectoral nature of the topic.

Health of migrants in SDG 3

Starting with SDG 3, which has 13 targets related to health and well-being, migrants have specific health vulnerabilities that can be addressed in the context of achieving these targets. For example, migrant women often have poor access to reproductive health care, resulting in higher maternal and infant mortality rates (also addressed in Target 5.6). Living in poverty and without a regular source of primary care can result in poor health outcomes for the children of migrant parents, both those in host countries and those left behind. Due to their mobility in regions where these diseases are more prevalent, migrants are may be more vulnerable to acquiring and transmitting infectious diseases such as HIV/AIDS, tuberculosis, and malaria. Sri Lanka, for example, has recently seen that returning migrants account for a significant majority of new malaria cases in the country.[74] And the challenging migration and resettlement process can exacerbate stress-fuelled substance abuse and mental health problems, especially for those

in an irregular situation or in precarious employment circumstances. The call for universal health coverage in SDG 3.8 is particularly important to migrants, as detailed in the previous section on social protection (reflected as well in Target 1.3).

Managing the mobility of health workers is critical issue that affects both migrating health professionals in their destination countries as well as the health systems of the countries they have left behind. Addressed in Target 3.c as well as in numerous international collaborations and policy statements, the demand for health workers across the globe requires a delicate balancing act between the rights and opportunities inherent in individual mobility and the need to build of the capacity of health systems in less resourced countries. Better implementation of existing mechanisms to manage this mobility flow is required, as well as a better appreciation for the complex factors involved the decision of health professionals to return home after migration.[75]

Migrant health in other SDGs

In addition to Target 10.7, which directly addresses the need for migration policies to ensure the safe and orderly movement of people, the needs of migrants related to health can be tracked throughout the other SDGs. For example, Target 1.5 addresses the need for strengthening resilience to economic, social, and environmental shocks and disasters, which often compel the flight of migrants and refugees in health-threatening circumstances. Calls for the elimination of violence against women (Target 5.2) and forced labour and trafficking of children (Targets 8.7 and 16.2) recognize the vulnerability of migrants to these harms throughout the migration process. Access to adequate housing and basic services addressed in Target 11.1 is pertinent to rural to urban migrants who often live in slums and to IDPs and refugees who may be living in camps or migration centers with little access to formal health services. Promoting safe and secure working environments for all workers, including migrant workers, (Target 8.8) specifically addresses the health needs of migrants who are exposed to multiple health risks due to unsafe working and living conditions.

There are many models that attempt to address the migrant health needs invoked in the SDG goals and targets. In Sudan, IOM supports a mobile health clinic focused on sexual and reproductive health needs, including maternity, infant feeding, and HIV/AIDS prevention services.[76] In Myanmar, outreach health workers were trained to identify and refer for treatment migrants with TB. Screening, treatment, and health education sessions are provided to migrants and host community members.[77] In the United States, a hospital-sponsored Refugee House Calls program sends doctors and nurses to refugee homes, especially those with elderly or disabled patients, to provide continuity of care for chronic conditions.[78] Migrant Health Forums in different areas of South Africa provide information sharing and program coordination between migrant communities, local government, health care providers, NGOs, and researchers[79].

Collaboration and coordination

The needs of migrants and their voices must be involved in goal-setting for the Sustainable Development Agenda at all levels and across organizations and sectors. Multilateral and regional collaboration, including the participation of civil society organizations, is critical to developing

policies and programs that address the health needs of migrants. Strategies include global targeted health initiatives, harmonized social protection mechanisms, and timely responses to emerging migrant or refugee influxes.[80] For example, the Joint UN Initiative on Migration and Health in Asia (JUNIMA) brings together governments, civil society organizations, regional associations, development partners, and UN agencies to develop and promote policies, build partnerships, share information, and support action on disease prevention, treatment, care and support services for migrant populations in Asia.[81] In Africa, The South African Development Community (SADC) ratified the Declaration on Tuberculosis in the Mining Sector, and health ministers from South Africa and other SADC member states have signed bilateral agreements to colalboraste on a range of health issues, including the treatment of patients, between countries.[82]

Strategies for data collection and monitoring

At the national, regional, and international levels, one of the most critical needs is data gathering and analysis, as discussed in SDG 17.18, which explicitly includes migratory status and ethnicity in its call to build capacity for producing high-quality, timely and reliable data. The report of the UN Secretary-General on International Migration and Development states that countries "should promote evidence-based policymaking and invest in data collection, research and capacity development with respect to migration and its impacts on individuals, communities and societies."[83] It is impossible to take any meaningful action without data to plan, monitor and evaluate efforts to improve the health of migrants. Addressing the needs of various migrant populations should be coupled with improved monitoring of their health status and risk factors. This can be achieved by including migration variables in routine national surveys such as demographic health surveys, surveys conducted by national disease control programs, and workforce and living standards surveys. Better data would generate an evidence-based understanding of migrant health needs, their participation in social protection schemes, and the impact of migrant-tailored programs. More can be done to build on existing health information systems for data collection and analysis, introducing new measures where required.[84] One of the major challenges is the lack of standardized tools for monitoring the health of migrants within countries and across countries. National health information systems must facilitate the disaggregation of data about migrants to evaluate, plan for and monitor their health needs.[85] This is particularly important in managing non-communicable diseases, and tracking and treating infectious diseases that frequently affect migrants, such as HIV, TB and malaria.

An example of including migrants in early warning and risk reduction/management systems (SDG 3.d) is the Mekong Basin Disease Surveillance (MBDS) program involving Cambodia, China, Lao PDR, Myanmar, Thailand and Vietnam. The goals of this network are to improve cross-border infectious disease outbreak investigation and response by sharing surveillance data and best practices in disease recognition and reporting; develop expertise in epidemiological surveillance across the countries; and enhance communication and cooperation between the countries. The Migrant Integration Policy Index (MIPEX) Health strand is a questionnaire designed to supplement the existing seven strands of the MIPEX, which monitors policies affecting migrant integration in 38 countries in Europe, Asia, North America and Oceania.[86] The questionnaire measures the equitability of policies relating to four issues: migrants' entitlements to health services; accessibility of health services for migrants; responsiveness to migrants' needs; and measures to achieve change. The questionnaire is based on a European

Community-funded consultation process that involved researchers, international organizations, NGOs, and a wide range of specialists in health care for migrants.

Progress on migrant health since the first Global Consultation

With respect to efforts on migrant health since the 2010 Global Consultation, there has been no systematic effort to track progress on the recommendations, but several countries have worked to define strategies based on the Consultation framework. Many of the activities described throughout the paper have taken place in the time since the consultation, and many of the rationales for their programs reference the recommendations of the Consultation.

Additional national and regional actions include:[87]

- ongoing commitment by the government of Thailand to a multi-year master plan on border and migrant health, including provisions for a health insurance scheme for undocumented migrants and their families
- the development of a migrant health strategic plan in Bangladesh that focuses on policy frameworks, monitoring, and promoting multisectoral partnerships
- the adoption of a migrant health resolution[88] by the WHO Region of the Americas that places future action in the context of existing strategies for universal health coverage
- in Europe, a wide range of interventions, policy development, research, data collection and monitoring tools implemented by international organizations, state actors, NGOs, and collaborations between them[89]
- national scoping projects and consultations on migrant health following the 2010 Global Consultation in several African countries (e.g. South Africa[90] and Kenya[91]) and regional compacts focused on communicable diseases
- multilateral and multisectoral collaboration in the Middle East and Southern Europe to manage the health and psychosocial needs of the Syrian and other refugees

At the national level, the Government of Sri Lanka has made a dedicated effort to create a participatory, evidence-based and intersectoral National Migration Health Policy. The program features a

- broad definition of migration dynamics
- commissioned national research agenda that informed policy development
- focus on needs that could benefit from immediate action
- reporting and accountability framework
- national interagency coordination
- engagement with regional and international partners.

The effort has resulted in an impressive list of milestones and actions over the seven-year development and implementation process.[92]

Common themes for action that arise from an examination of these activities include:

- Promoting the inclusion of migrant health issues in national and global health and development agendas
- Developing frameworks for multi-sectoral, multi-stakeholder action and agenda setting, from the local to the global levels

- Identifying key health concerns for migrants through data collection, monitoring, research, and consultation
- Harmonizing and expanding social protections for health that include all migrants, through a variety of public and private mechanisms
- Strengthening health systems' and health workers' capacity to deliver migrant friendly and appropriate physical health and psychosocial services, disease prevention and health promotion programs

Conclusion

Migration offers many opportunities for individuals, communities and countries to advance development. Proactively addressing the health needs of migrants in a development context can support their health and well-being, enhance their societal and economic contributions, and help countries meet their overall health and development goals. Addressing these needs is challenging, given the complexity of migrant flows and characteristics, the multiplicity of health and psychosocial concerns, and an overall environment that makes raising migrant issues difficult. Since the first Global Consultation, considerable efforts have been made by civil society, national, and international parties to include migrants in development and public health agendas, and the momentum has accelerated recently. Practice, policy and strategic lessons from these efforts must be examined, consolidated, and disseminated to support future action. The 2030 Sustainable Development Agenda offers a leverage point that migrant advocates across sectors can use to press for the inclusion of migrant concerns in health and development focused initiatives. Advancing the goal of universal health coverage that includes migrants, coupled with collaborative action on health issues across the SDGs, will support the progressive integration of migrant issues in health planning and policy-making in all national, regional and international agendas.

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